

ABSTRACT

[0073] The detection of devices with duplicate media access controller (MAC) addresses in a cable network. A cable network device (CND) having a MAC address is connected by the cable network to a cable modem termination system (CMTS) having a gateway interface address. A centralized storage of historical cable modem MAC address/giaddr tuple data is used to identify CNDs that report duplicate MAC addresses. The cable network tracks the CND MAC address/giaddr tuple data of all CND requests that it receives and stores the MAC address/giaddr tuple data into a datastore (such as a database). When a CND seeks to access the network, the cable network looks into the datastore to determine whether the CND MAC address of the CND has previously been stored with a different associated giaddr, which would imply that there are multiple CNDs attached to different CMTSs where the CNDs share the same MAC address. If such duplication is detected, an appropriate remedial response is taken.